Method 1 - Babbitt Score

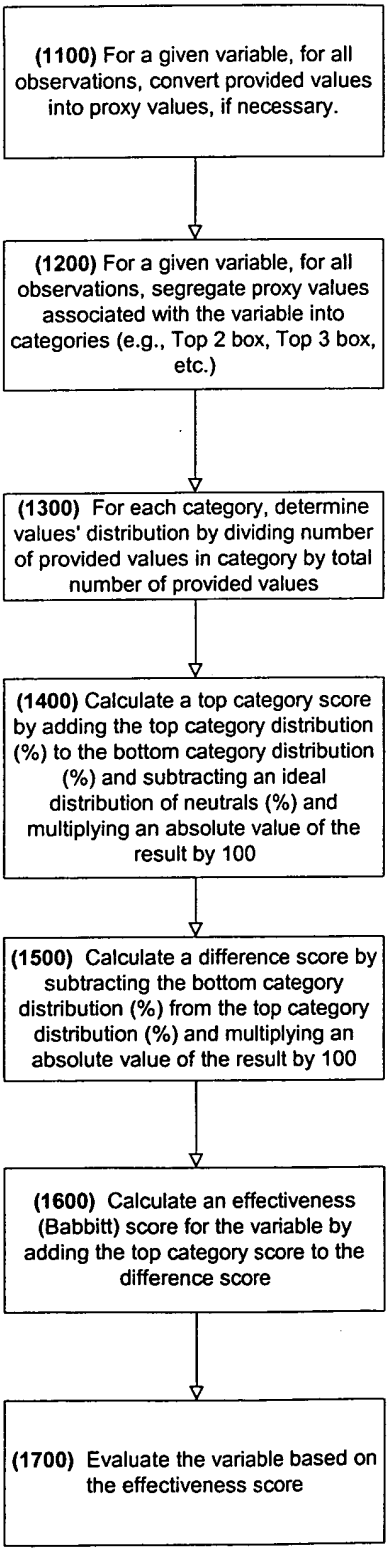


Fig. 1

Method 2 - Bestfit Clustering

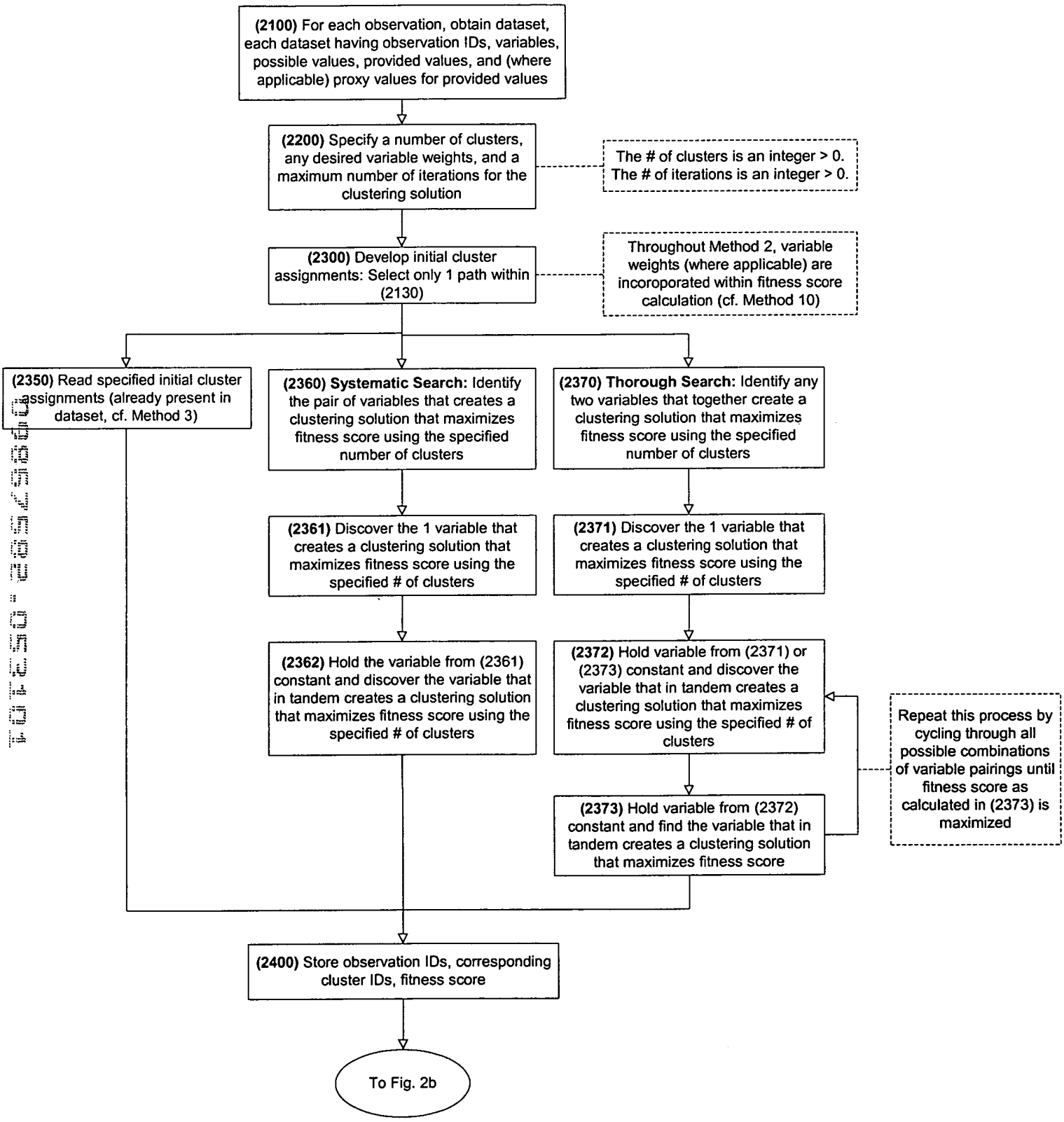


Fig. 2a

Method 2 - Bestfit Clustering Continued

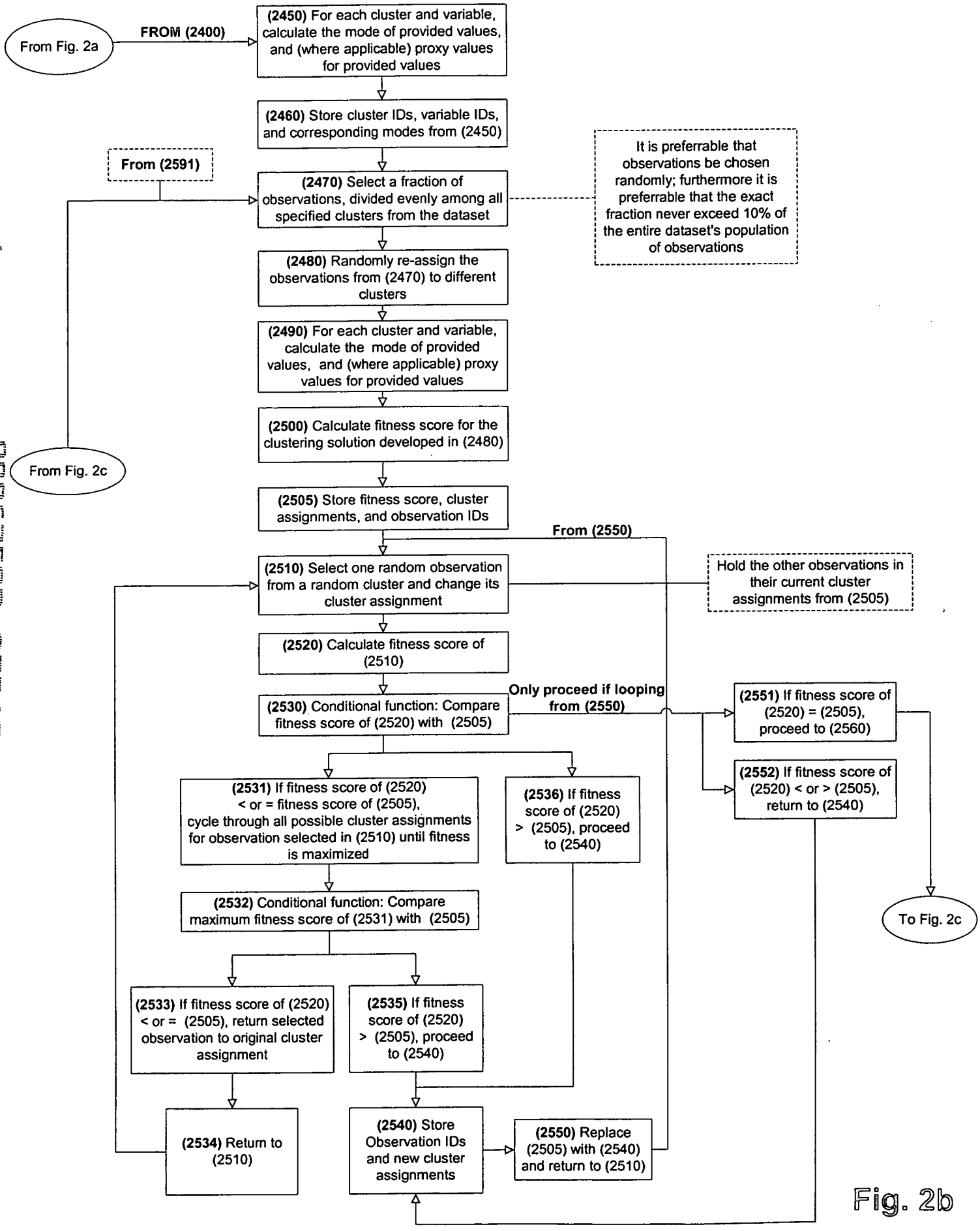


Fig. 2b

Method 2 - Bestfit Clustering - Continued

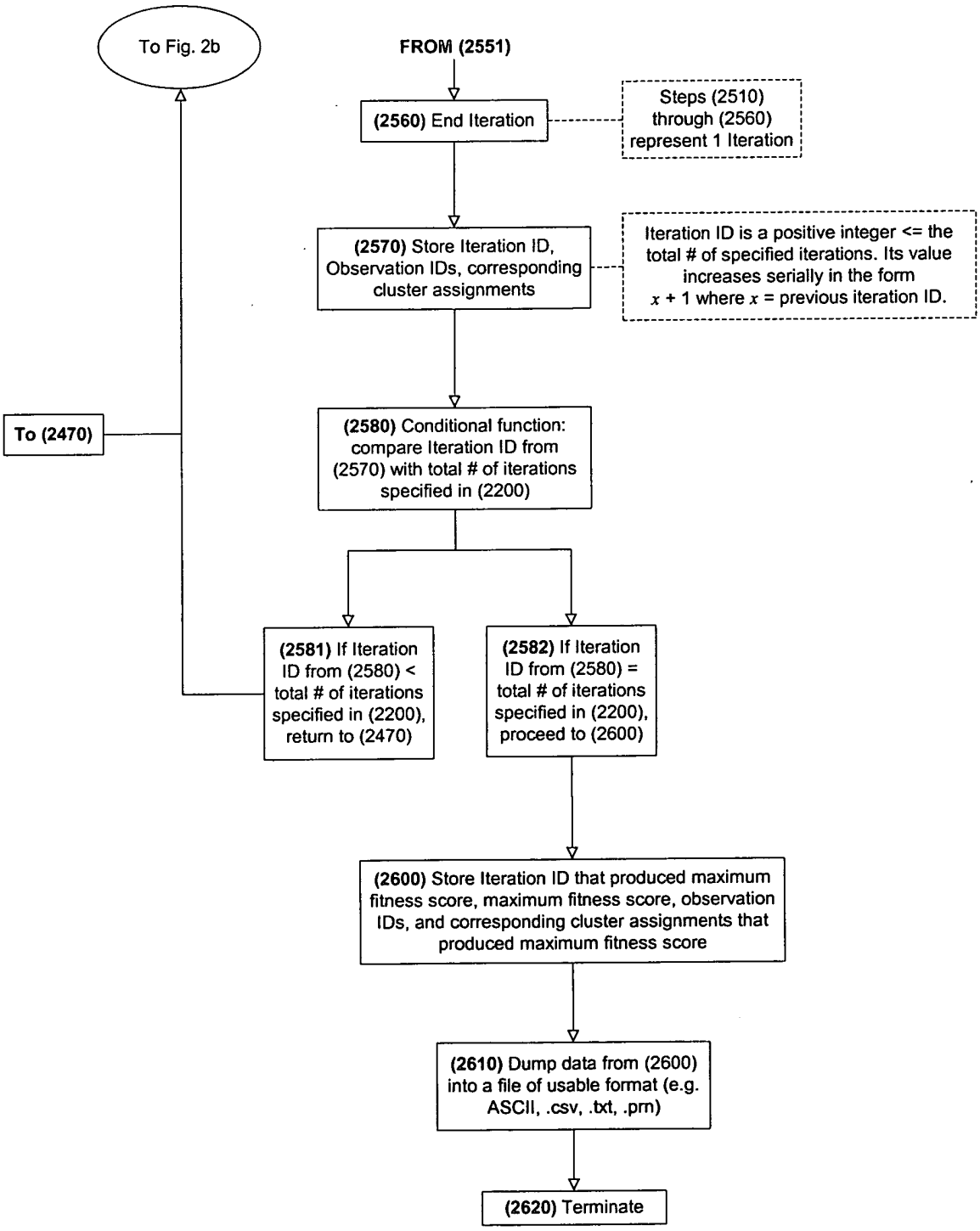


Fig. 2c

Method 3 - Champion/Challenger Clustering Refinement

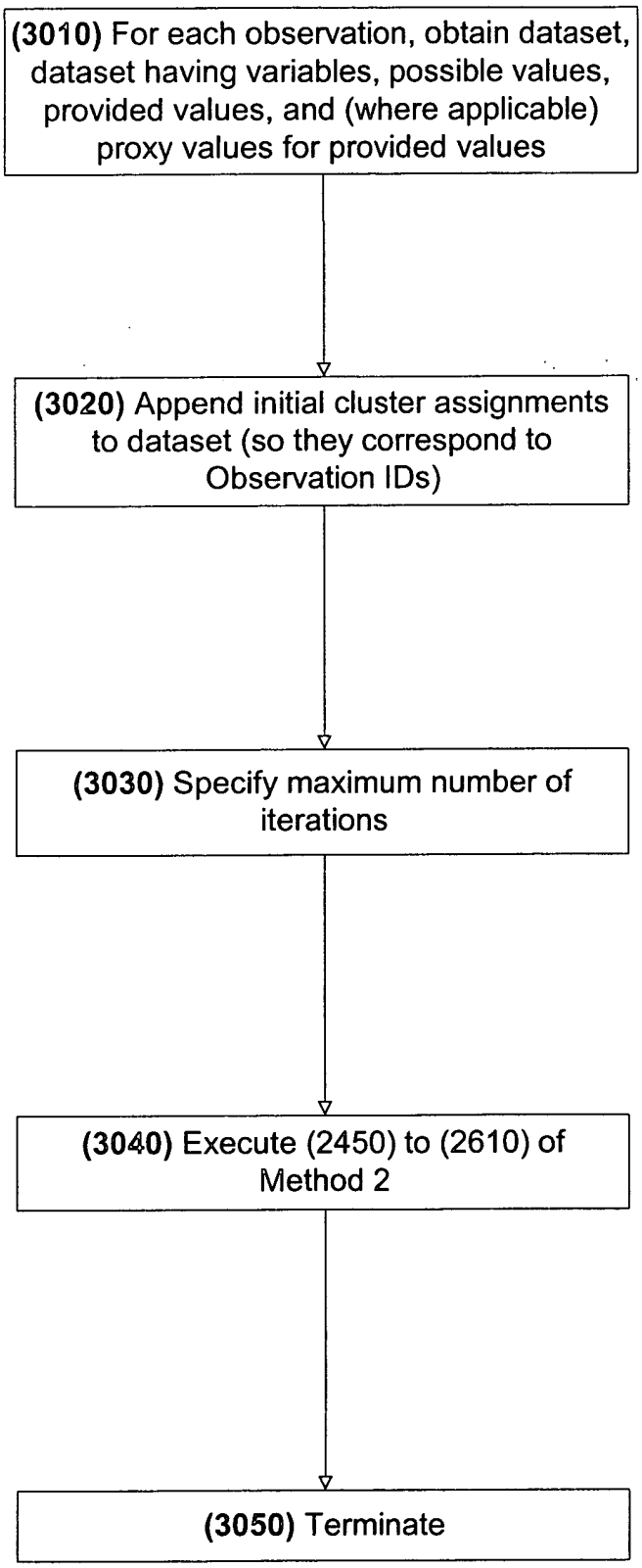


Fig. 3

Method 4 - Composition Analysis

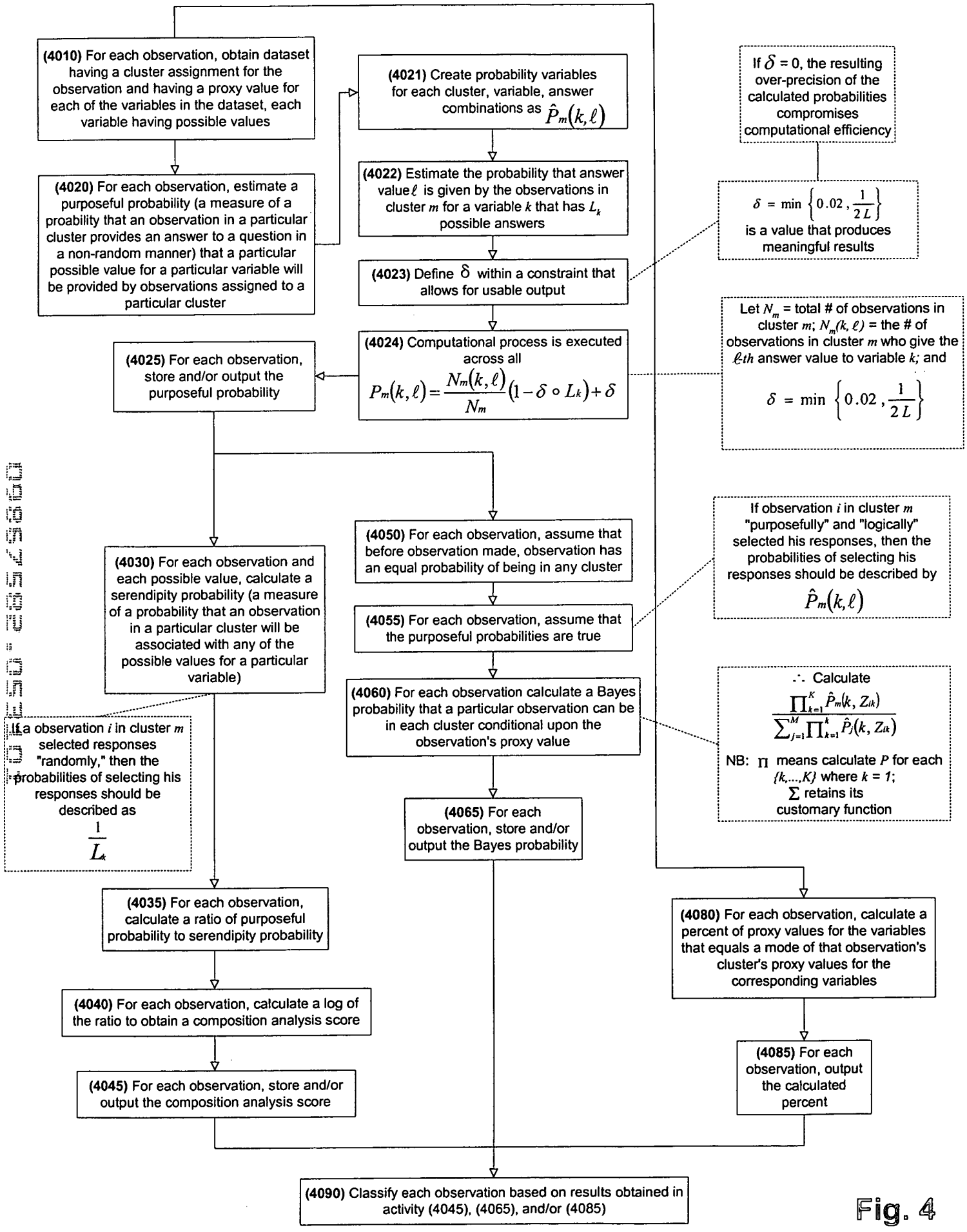


Fig. 4

Method 5 - Segmentation-on-the-Fly

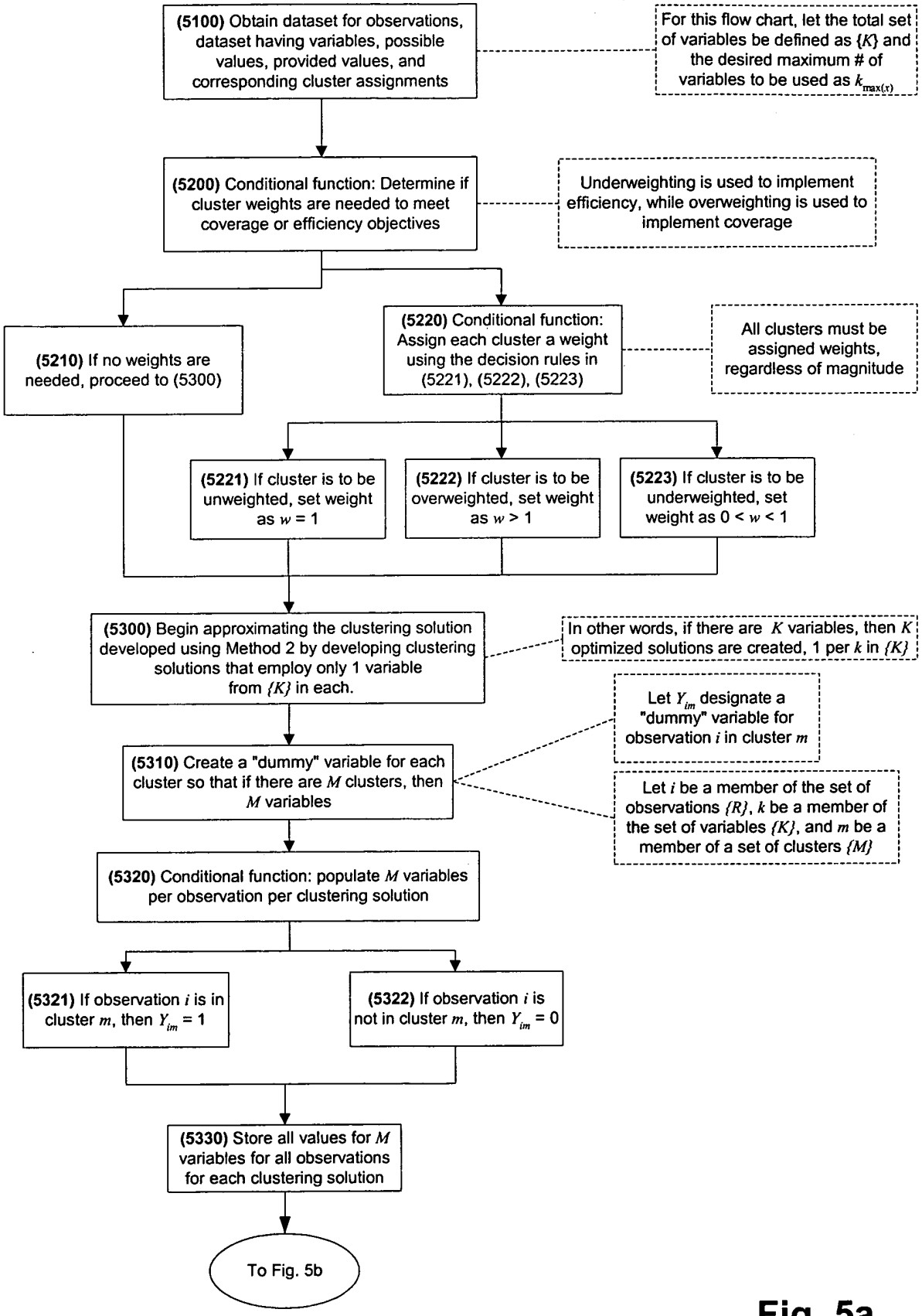


Fig. 5a

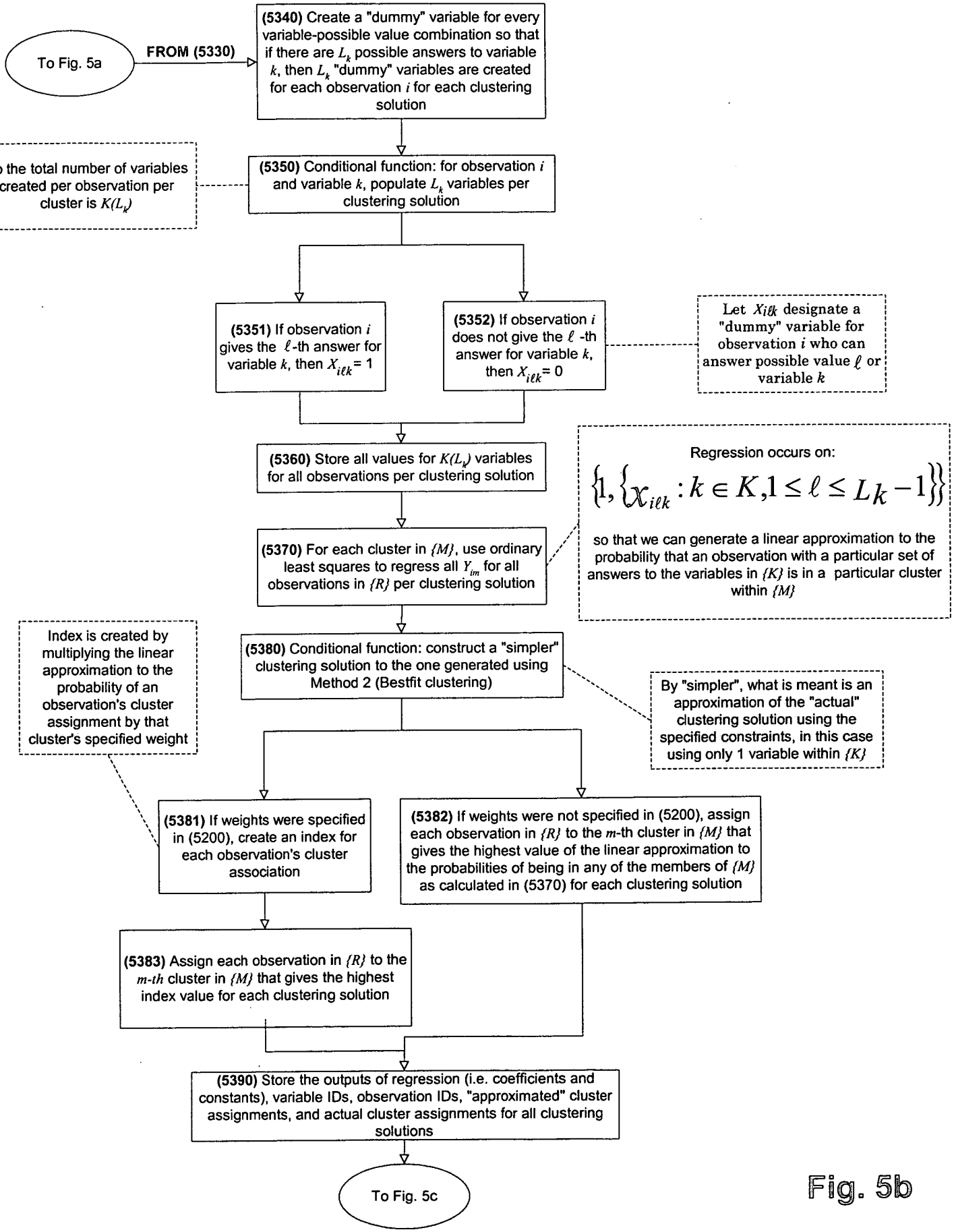

To Fig. 5a
FROM (5330)
(5340) Create a "dummy" variable for every variable-possible value combination so that if there are L_k possible answers to variable k, then L_k "dummy" variables are created for each observation i for each clustering solution
So the total number of variables created per observation per cluster is $K(L_k)$
(5350) Conditional function: for observation i and variable k, populate L_k variables per clustering solution
(5351) If observation i gives the ℓ-th answer for variable k, then $X_{i\ell k} = 1$
(5352) If observation i does not give the ℓ-th answer for variable k, then $X_{i\ell k} = 0$
Let $X_{i\ell k}$ designate a "dummy" variable for observation i who can answer possible value ℓ or variable k
(5360) Store all values for $K(L_k)$ variables for all observations per clustering solution
Regression occurs on:
$\left\{1, \left\{x_{i\ell k} : k \in K, 1 \le \ell \le L_k - 1\right\}\right\}$
so that we can generate a linear approximation to the probability that an observation with a particular set of answers to the variables in {K} is in a particular cluster within {M}
(5370) For each cluster in {M}, use ordinary least squares to regress all Y_{im} for all observations in {R} per clustering solution
Index is created by multiplying the linear approximation to the probability of an observation's cluster assignment by that cluster's specified weight
(5380) Conditional function: construct a "simpler" clustering solution to the one generated using Method 2 (Bestfit clustering)
By "simpler", what is meant is an approximation of the "actual" clustering solution using the specified constraints, in this case using only 1 variable within {K}
(5381) If weights were specified in (5200), create an index for each observation's cluster association
(5382) If weights were not specified in (5200), assign each observation in {R} to the m-th cluster in {M} that gives the highest value of the linear approximation to the probabilities of being in any of the members of {M} as calculated in (5370) for each clustering solution
(5383) Assign each observation in {R} to the m-th cluster in {M} that gives the highest index value for each clustering solution
(5390) Store the outputs of regression (i.e. coefficients and constants), variable IDs, observation IDs, "approximated" cluster assignments, and actual cluster assignments for all clustering solutions
To Fig. 5c

Fig. 5b

Method 5 - Segmentation-on-the-fly - Continued

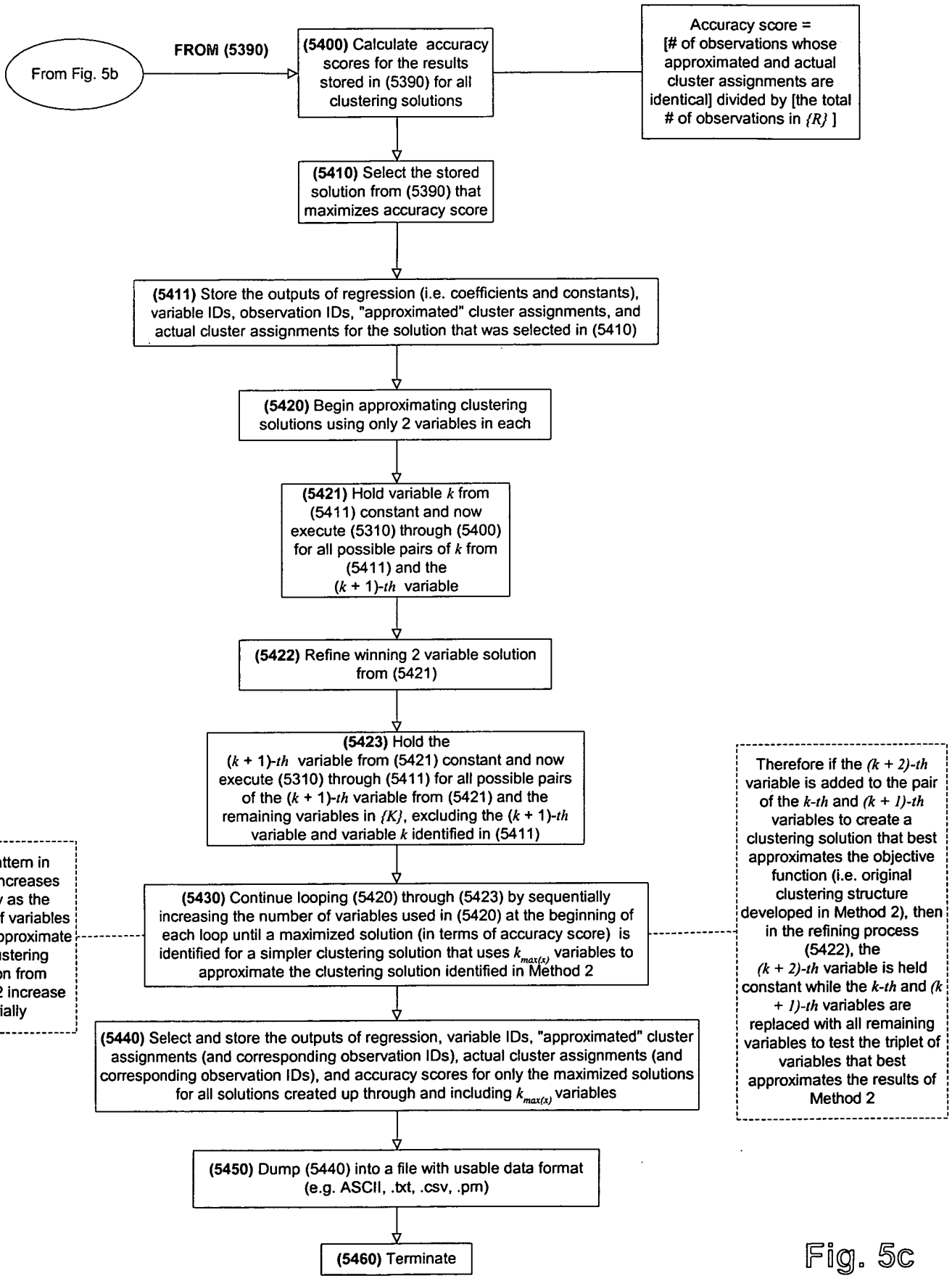


Fig. 5c

Method 6 - Behavioral Segment Scoring

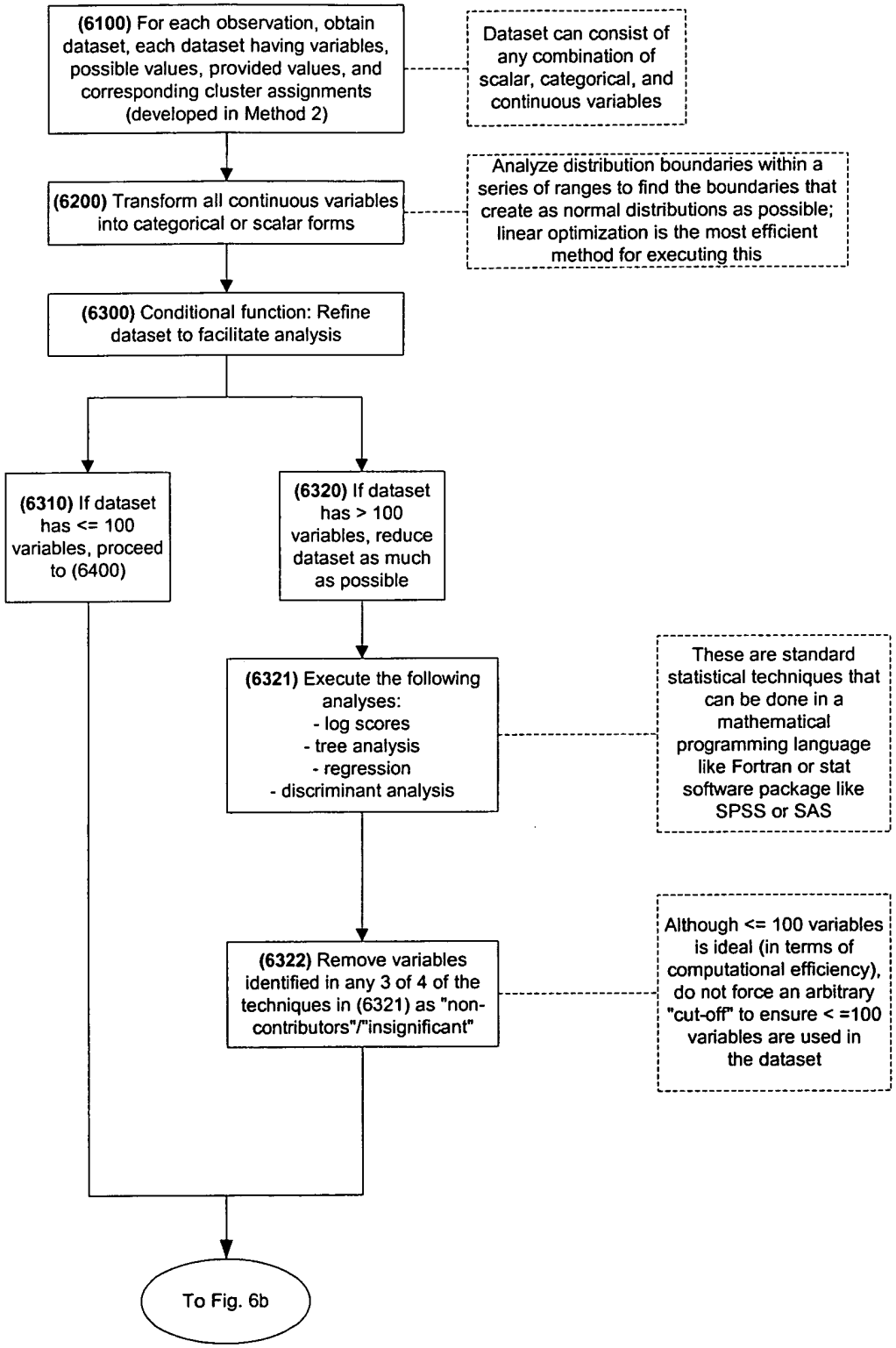


Fig. 6a

Method 6 - Behavioral Segment Scoring - Continued

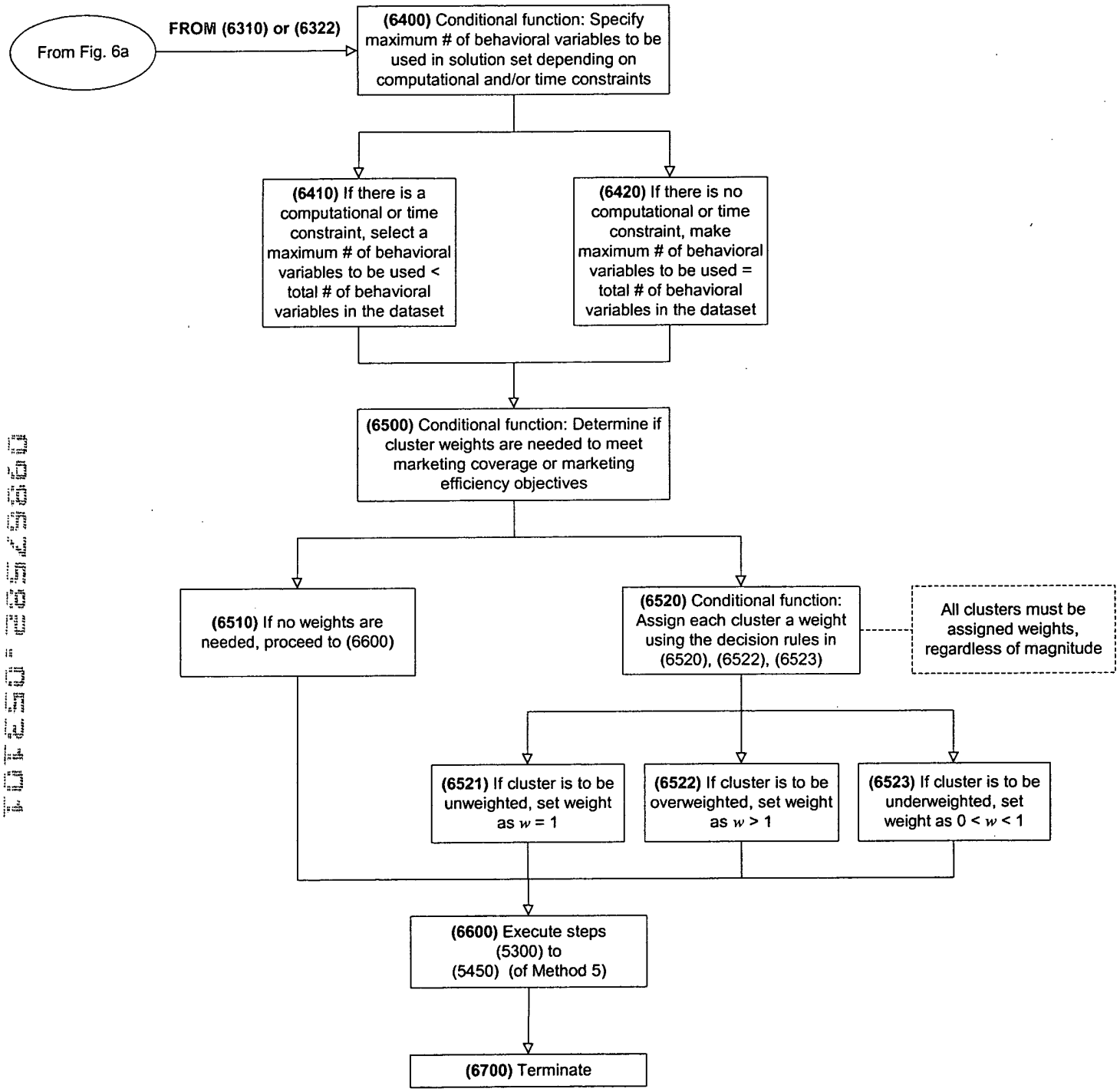


Fig. 6b

Method 7 - Panel Analysis

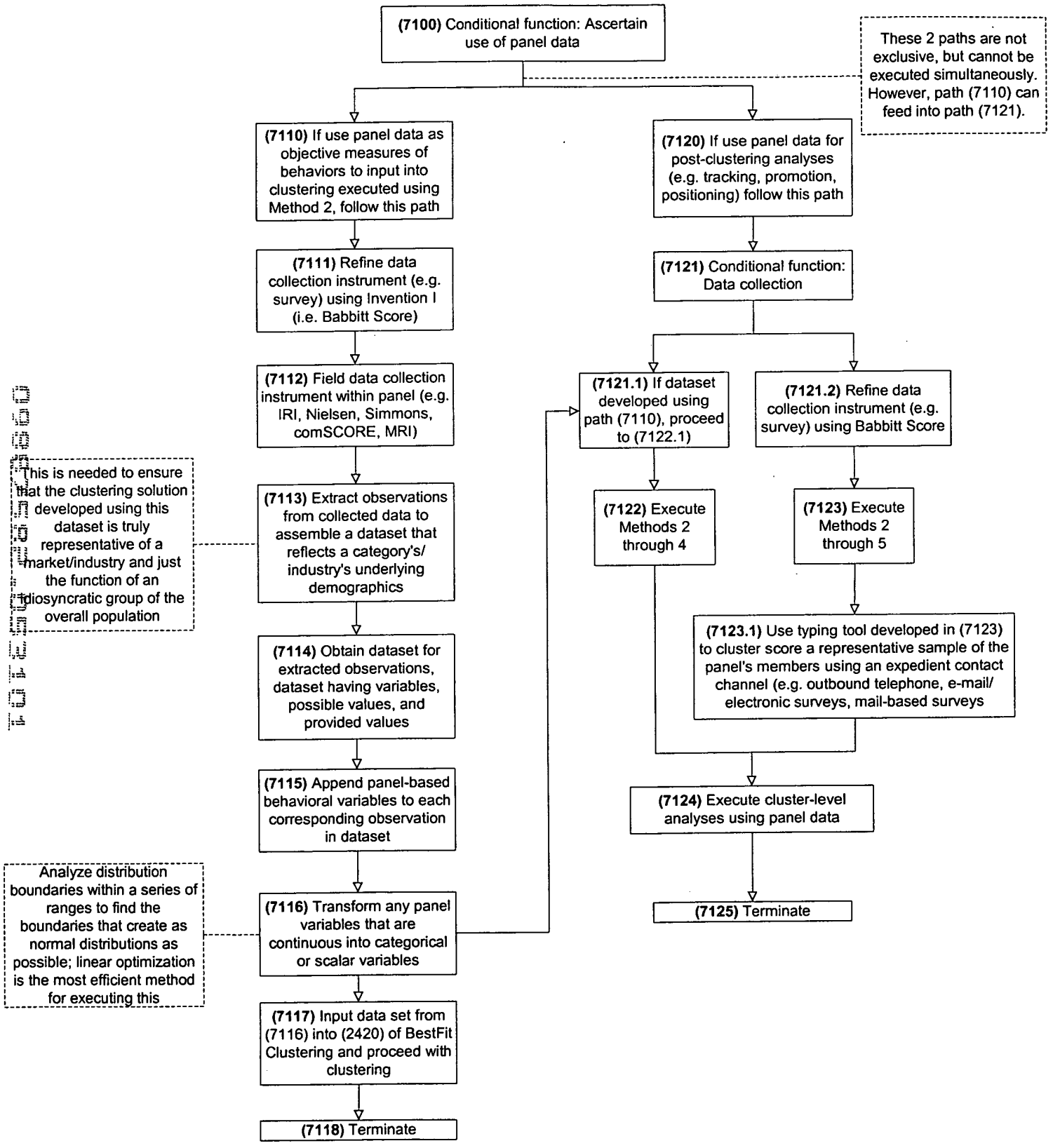


Fig. 7

Method 8 - Overall Segment-Based Marketing Process

Fig. 8

Information Device 9

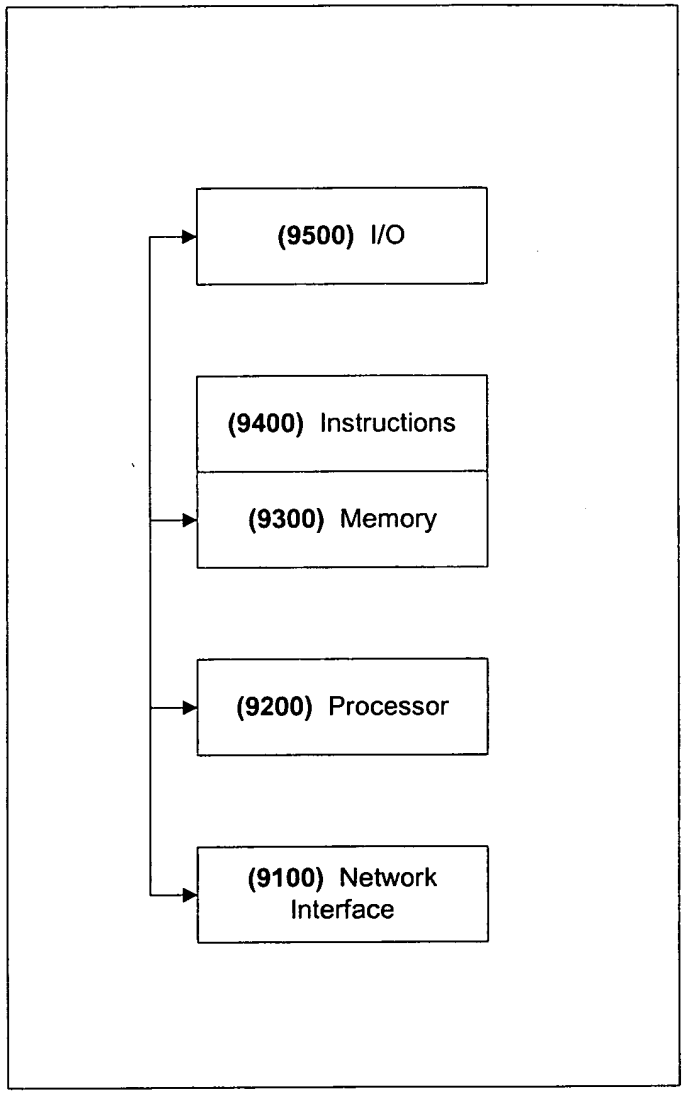


Fig. 9

Method 10 - Fitness Score Calculation

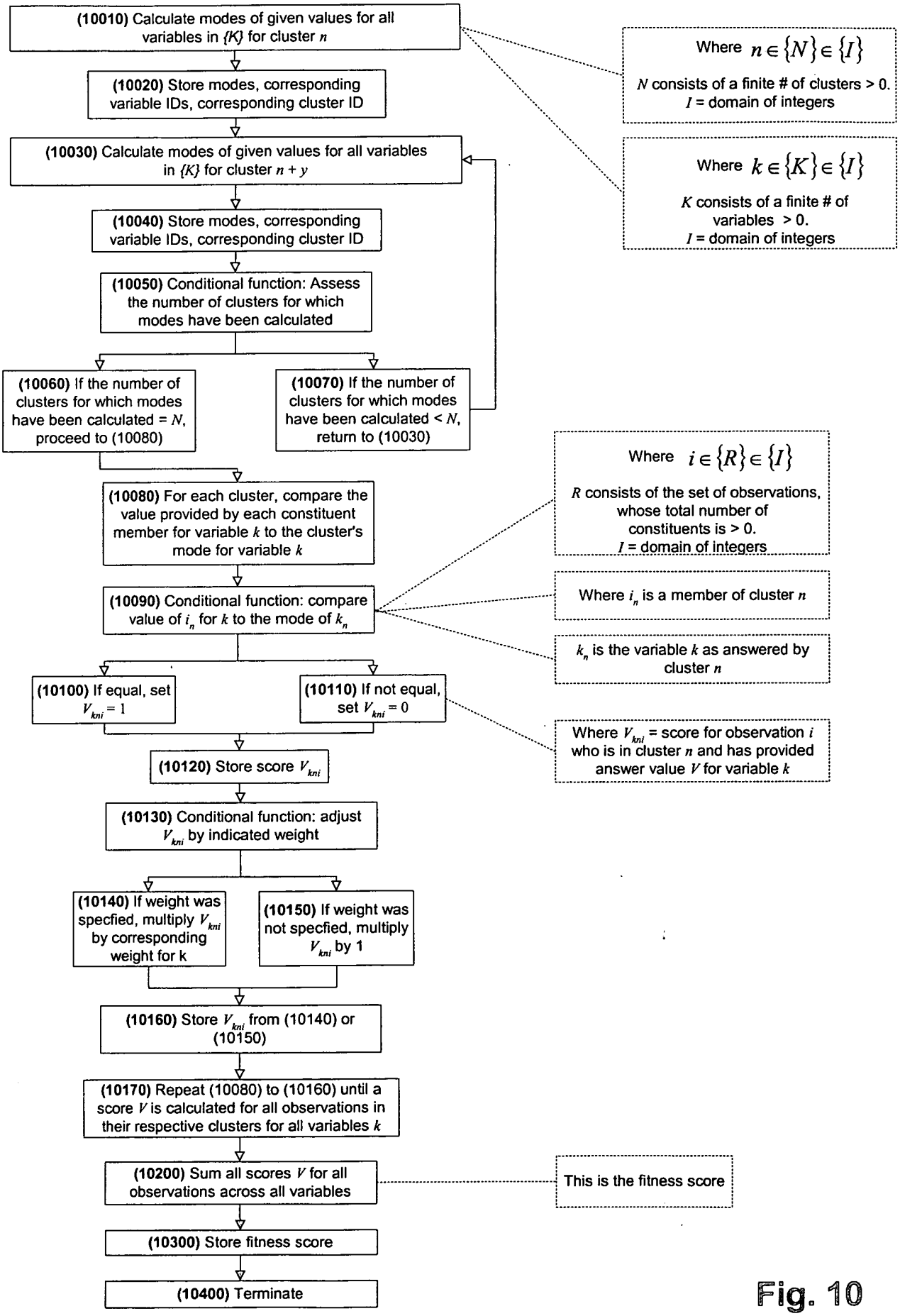
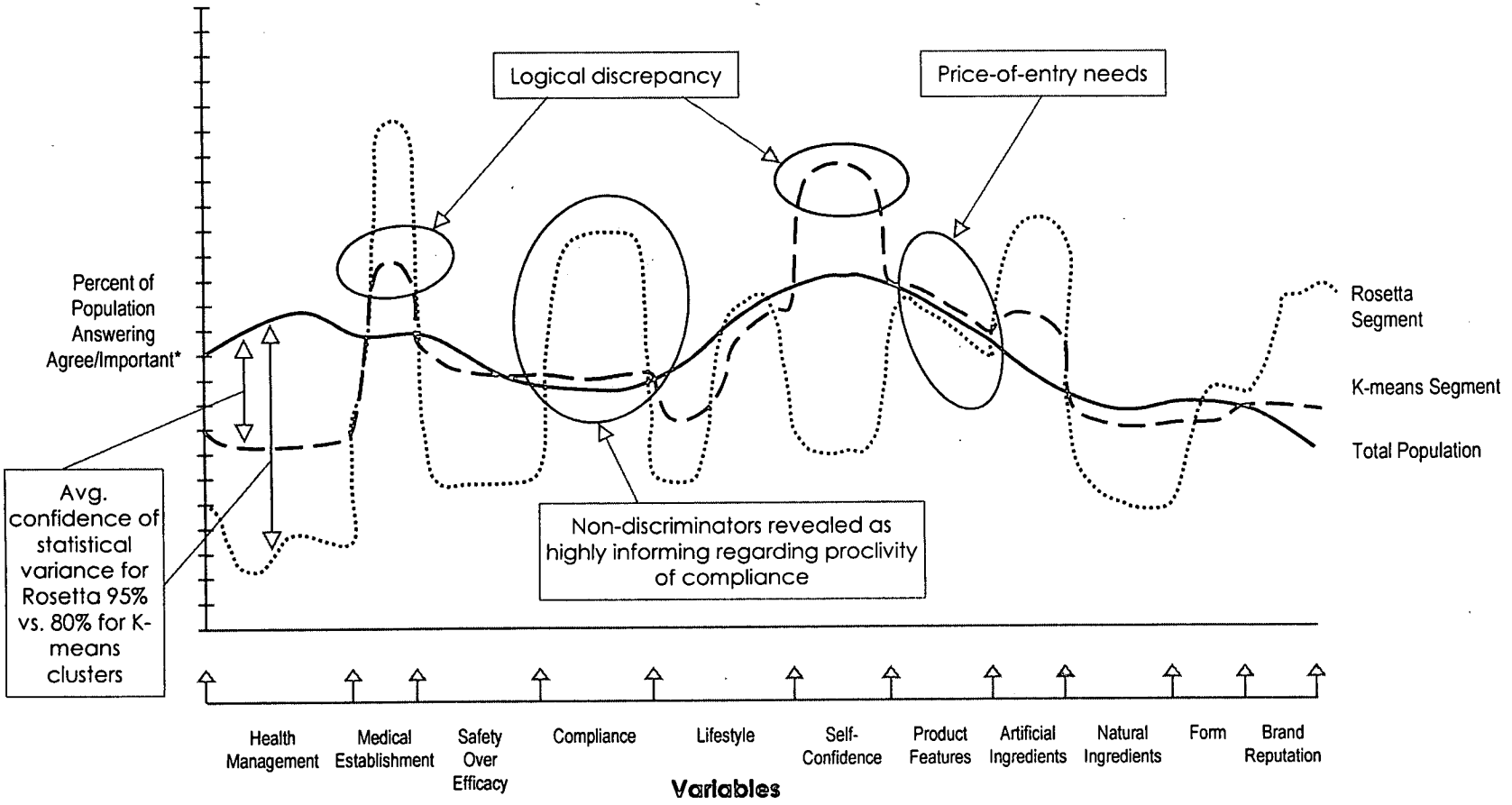


Fig. 10

FIG. 11

Blinded Case Study



* Responses normalized for similar variables with opposite wording/phrasing.